



Fitness Testing Protocol 2007/08

Our Vision is to become the pre-eminent ski and snowboard racing environment in Alberta as demonstrated by racer performance and attitude, fiscal strength, and the ability to attract coaches and athletes alike.

Fitness testing will be done for all of our athletes in the Kinder Provincial and FIS Programs in May, early September and late October each year. Participation in the fitness testing is recommended but optional for athletes in Nancy Greene, Nancy Greene Plus, Regional and Snowboard programs. This will provide us with baseline data which will be used in the planning of our programs. The following testing protocol has been designed to be consistent with fitness testing protocols of Alpine Canada Alpin and the Canadian Ski Coaches Federation.

Warm up

Fitness testing will begin with a twenty (20) minute warm up consisting of aerobic warm up and active stretching.

Height

Materials required: Measuring tape

Unit measured in: Centimetres to the nearest .5cm

Procedure:

- Athlete stands against a wall **without shoes**
- Heels, buttocks, shoulders and back of the head all in contact with the wall

Weight

Materials required: Scale

Unit measured in: Kilograms to the nearest decimal place (multiply by 2.2 for lbs)

Procedure:

- Record the athlete's body weight in kilograms
- Athletes should be dressed **without shoes**

Maximum Crunches

Materials required: Yoga mat

Component tested: Abdominal strength & endurance

of attempts: One (1)

Duration: As long as required

Procedure:

- the athlete will start lying on their back with arms across their chest
- the athlete pulls themselves up with their abdominal muscles while using good form. Shoulders should reach **45 degrees**.
- the athlete then returns to the starting position (shoulders on the ground)
- the athlete will do as many continuous crunches as possible without stopping
- Heels must remain planted on the floor for the duration of the test (without any assistance)

Maximum Push Up

Materials required: Ten (10) mini cones

Component tested: Relative strength & endurance of the upper body

of attempts: One (1)

Duration: As long as required

Procedure:

- the athlete will start lying on his/her stomach with arms positioned at 90 degrees of elbow flexion and fingers pointing forward
- the athlete will push up from the floor by fully lengthening the elbows and using the toes as a pivot point. The body must be kept in one piece; rigid with **no bowed** or arched hips
- the athlete then returns back down until they touch their upper chest to the volcano cones placed beneath them
- the athlete will do as many continuous push ups as they can without stopping

Standing Long Jump

Materials required: Tape measure and masking tape

Component tested: Lower body power and stability

Measured in: Meters and centimetres

of attempts: Two (2)

Procedure:

- Athletes start with both toes behind the line (against a box or wall).
- The athlete performs one (1) single jump with maximal effort.
- The athlete must land solidly with good stability. Final measurement is taken from the heel which is furthest back. If the athlete loses balance forward or backwards, the test result will not count and should be repeated.
- The better of two (2) attempts will be scored

Penta Jump

Materials required: Tape measure and masking tape

Component tested: Lower body power and stability

Measured in: Meters and centimetres

of attempts: Two (2) per both legs, right leg and left leg.

Procedure:

- Two legged jumps. Athletes start with both toes behind the line (against a box or wall).
- The athlete performs five (5) consecutive jumps in a continuous motion (rhythm).
- The athlete must land solidly with good stability. Final measurement is taken from the heel which is furthest back. If the athlete loses balance forward or backwards, the test result will not count and should be repeated.
- The better of two (2) attempts will be scored
- Repeat as above for right and left legs.

10 Meter Soccer Dribble

Materials required: 10 pylons or cones, stopwatch and a soccer ball

Component tested: Foot coordination and directional quickness

of attempts: Two (2)

Measured in: Seconds

Duration: N/A

Procedure:

- Set 10 pylons in a straight line, exactly 1 metre apart
- On the 'Ready, Set, GO!' command, the athlete dribbles the ball through the cones as fast as possible while keeping control of the ball; **the athlete must go around the first cone to the right hand side** (left shoulder over the cone)
- The timer should start the watch on the first movements of the athlete's feet
- The timer will stop the time as the **athlete crosses the finish line; not the ball**

Illinois Agility Run

Materials required: Eight (8) pylons, stop watch and sufficient width (5 track lanes)

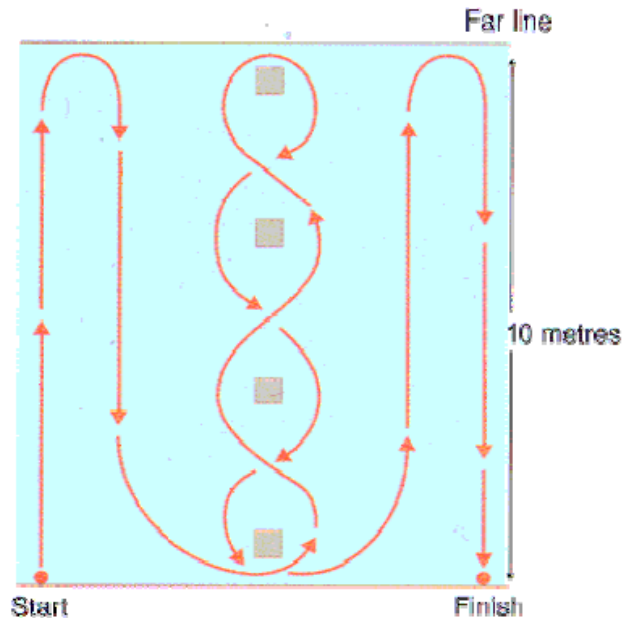
Component tested: Agility, directional quickness and coordination

Measured in: Seconds

of attempts: Two (2); one attempt in each direction; left & right

Procedure:

- The athlete lies face down on the floor at the start point
- On the starter's command (Ready, Set, GO!) the athlete jumps to their feet and negotiates the course around the cones to the finish - **IMPORTANT** - the athlete must face the same direction for the entire duration of the course!
- Conduct two trials one starting from left to right (start -finish) and the other right to left (finish - start)
- one (1) restart is given if necessary: use your discretion and give the athlete the benefit of the doubt



10m Sprint

Materials required: Stop watch, 20m track & pylons

of attempts: Two (2); best time to be used

Measured in: Seconds

Duration: Not applicable

Procedure:

- have the athlete start from a stationary and ready position at the starting line with one or two hands on the line
- On the 'Ready, Set, GO!' command, the athlete sprints the 10m distance as fast possible. The athlete should decelerate over the remaining 10m
- The timer should start the watch on the first movements of the athlete's hand and stop the watch as the athlete crosses the 10m line
- The athlete will have two (2) chances with a three (3) minute rest in between attempts. Measure to the nearest .1's taking the best attempt as the score.

40m Run

Materials required: Stop watch, 60m track & pylons

of attempts: Two (2); best time to be used

Measured in: Seconds

Duration: Not applicable

Procedure:

- have the athlete start from a stationary and ready position at the starting line with one or two hands on the line
- On the 'Ready, Set, GO!' command, the athlete sprints the 40m distance as fast possible. The athlete should decelerate over the remaining 20m
- The timer should start the watch on the first movements of the athlete's hand and stop the watch as the athlete crosses the 40m line
- The athlete will have two (2) chances with a three (3) minute rest in between attempts. Measure to the nearest .1's taking the best attempt as the score.

Leger Boucher (beep) Test

Materials required: Pylons, CD player, Laptop and Speakers

Component tested: Aerobic endurance; predictive VO2 max

of attempts: One (1)

Measured in: Stage and level achieved

Procedure:

- pylons or masking tape is set in two (2) parallel line exactly 20m apart
- play the test after the athlete's line up on the line
- if the athlete loses pace with the disc, they are issued a warning to maintain the pace. If an athlete falls short of the line twice in a row, the test is terminated for that athlete.
- The last stage completed shall be recorded for the athlete. The athlete should attempt to reach the highest possible stage as the predictive VO2 value is based upon maximal effort.

Cool Down

Fitness Testing should wind up with a progressive twenty (20) minute cool down consisting of:

- 10 minutes light jog
- 10 minutes static stretch

Materials required for testing day

- clipboards
- pens & pencils
- testing worksheets and paper
- masking tape
- measuring tape
- Pylons and volcano cones
- Soccer ball

Test order by program

Dream Team:

1. Height
2. Weight
3. Maximum Crunches
4. Maximum Pushup
5. Standing long Jump
6. 10m Sprint
7. 40m Run

NG:

1. Height
2. Weight
3. Maximum Crunches
4. Maximum Pushup
5. Standing long Jump
6. Penta Jumps
7. Soccer Dribble
8. 10m Sprint
9. 40m Run

Regional & Snowboard:

1. Height
2. Weight
3. Maximum Crunches
4. Maximum Pushup
5. Standing long Jump
6. Penta Jumps
7. Soccer Dribble
8. 10m Sprint
9. 40m Run
10. Leger-Boucher (beep) test

NG Plus:

1. Height
2. Weight
3. Maximum Crunches
4. Maximum Pushup
5. Standing long Jump
6. Penta Jumps
7. Soccer Dribble
8. Illinois Agility Run
9. 10m Sprint
10. 40m Run

Kinder Provincial & FIS Programs

1. Height
2. Weight
3. Maximum Crunches
4. Maximum Pushup
5. Standing long Jump
6. Penta Jumps
7. Soccer Dribble
8. Illinois Agility Run
9. 10m Sprint
10. 40m Run
11. Leger-Boucher (beep) test